

ABSTRACT OF THE DISCLOSURE

METHOD AND APPARATUS FOR SCALABLE PEER-TO-PEER INQUIRIES IN A NETWORK OF UNTRUSTED PARTIES

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A method and apparatus for scalable inquiries in a network of communicating peers are provided. The method and apparatus of the present invention make use of communal filters and randomization to determine which client devices will output a message that is to be broadcast to a community of client devices. Each message is
10 assigned a probability value that is determined based on various criteria or may be determined randomly. The message is then transmitted to the client devices who apply their own respective display criteria to the message parameters to determine if the message is one that is of interest to the user of the client device. If the message is not of interest to the user of the client device, the message is discarded. If the message is of
15 interest to the user, logic is applied to the parameters of the message to determine whether the message should be displayed to the user or not. This logic may involve determining whether the message has been previously displayed to the user, whether the message has been received but not previously displayed, and the like. In addition, if the message has not been previously displayed to the user, a randomly generated number, which may be
20 weighted based on other criteria, is generated and compared with the probability value associated with the message. Based on this comparison, the message is either displayed or not displayed on the client device. This probability value of the message may be adjusted with each subsequent rebroadcast of the message to increase the size of the subset of users that will see the message.